

FACT SHEET



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ARROW DEPLOYABILITY PROGRAM

BACKGROUND

Israel began work on a theater missile defense (TMD) system in 1986, with the signing of a Memorandum of Understanding (MOU) with the United States. While the threat posed by ballistic missiles has been a concern for Israel since the mid-1980s, Iraqi ballistic missile attacks during the Gulf War underscored the danger posed by the buildup of missile technology in the region. Currently, Iraq, Iran and Syria all possess ballistic missile arsenals. Iraq's use of Scud missiles during the Gulf War highlighted Israel's vulnerability to these weapons, should armed conflict erupt once again in the region. At the time of the Gulf War, Israel had no viable TMD system, and thus was reliant upon the U.S. for defense against Iraqi SCUD attacks.

In 1988, the U.S. and Israel began what was to evolve into a three-phase program to develop the ARROW series of Anti-Tactical Ballistic Missiles (ATBMs). Israel and the U.S. have a strong history of ballistic missile defense (BMD) cooperation, including cooperation on testbed related experiments, and TMD architecture studies. The initial phase involved the ARROW Experiments Program, intended to validate the ARROW concept and develop the ARROW interceptor prototype and launcher.

The second stage of the ARROW development was designated the ARROW Continuation Experiments (ACES) Program. The ACES resulted in a successful missile target intercept by a single stage ARROW-1 interceptor. Work was then shifted to the two-staged ARROW-2 missile, which achieved two successful intercepts of simulated SCUD missiles on August 20, 1996, and March 11, 1997. This was followed by a successful fly-out against a virtual target on September 14, 1998. This flight test completed the ACES program.

Goals for ARROW Cooperation

- Assist Israel in developing an effective TMD capability.
- Make ARROW and analogous U.S. TMD systems interoperable.
- Use ARROW flight test data as a risk-reduction measure in U.S. TMD development.



Arrow Flight Test - February 20, 1996

ADP PROGRAM

The follow-on to the ACES Program is the ARROW Deployability Program (ADP), aimed at integrating the entire ARROW Weapon System (AWS), with a planned User Operational Evaluation System (UOES) capability. Continuing through 2002, the ADP is the cornerstone for U.S./Israeli BMD cooperation.

The primary goal of the ADP is to complete the developmental stage of the AWS and fully integrate the different components of the system. This will be accomplished through extended testing of the ARROW-2 interceptor and other support components, subjecting them to a variety of simulated threats. The ADP is also intended to establish interoperability, ensuring that Israeli TMD capabilities are closely integrated with those of the U.S. Although the U.S. does not plan to field the AWS, participation in the ARROW project greatly assists the U.S.'s own TMD

ADP PROGRAM [CONTINUED]

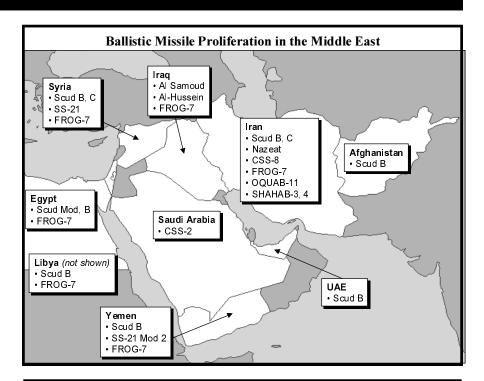
development. Through ARROW, the U.S. seeks to improve its own system capabilities, utilizing ARROW test data for risk reduction when evaluating U.S. systems. In doing so, the U.S. can learn from ARROW's successes and failures, and facilitate U.S. TMD development and deployment.

ARROW WEAPON SYSTEM

In addition to the jointly developed ARROW interceptor and launcher, Israel developed the Fire Control Radar (FCR), Fire Control Center (FCC), and Launch Control Center (LCC) that comprise the AWS.

The ARROW has an engagement footprint somewhere in between the U.S. PATRIOT Advanced Capability-3 (PAC-3) and Theater High Altitude Area Defense (THAAD), and it functions effectively in the upper tier. Should Israel continue to field the U.S.-built lower-tier PATRIOT systems, Israel will possess a formidable multi-tier missile defense capability.

The ARROW interceptor is a twostaged missile that uses a blastfragmentation warhead to eliminate any incoming missiles, as opposed to the kinetic energy, hit-to-kill warheads employed in PAC-3 and THAAD.



Conclusion

The ADP is a critical stage in the ARROW development process. Once completed, Israel will possess the ability to produce and field a robust missile defense capability, thus greatly enhancing the safety of an important U.S. ally in a region of considerable instability.

U.S. involvement in ARROW is both consistent with established U.S. policy and a benefit to the U.S. TMD effort as a whole. The ADP continues a long-standing cooperative arrangement with Israel, providing tangible benefits to both sides, in the form of information and technology sharing, as well as improving regional security. The ADP continues as a project that has been a hallmark effort in the realm of international TMD cooperation.

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